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### METAPHORIZATION OF CATEGORIES OF DISEASE FROM A PERSPECTIVE OF COGNITIVE LINGUISTICS

The primary way of presenting phenomena which are elusive for the senses, the mechanisms of which exceed our direct cognitive abilities (e.g. viruses, bacteria, infection, treatment) and those that require abstract thinking is through a process of metaphorization. Before the bacteriological breakthrough, diseases could be conceptualized by means of metaphors of the imbalance of the internal system; of punishment, flaw, and sin; of mechanical defects; or by means of personalisation or reification. After Louis Pasteur, the war metaphor was developed and, with technological development, also the mechanistic metaphor, and then the bioinformatics metaphor. On the other hand, today we can see that, as we with become more aware of this process, there is also a need for a new way of their metaphorization to respond to new diseases, especially chronic and incurable ones. In this paper I will try to indicate and briefly discuss various metaphors of disease; however, the bulk of the attention will be dedicated to metaphors linking disease with war, as they are most popular in the contemporary culture.

Keywords: health, disease, metaphorization, cognitive linguistics

*Mycobacteria are sneaky: they could hide in the lymph nodes for several dozens of years after getting to the organism and attack only when the patient's immunity is reduced. [...] Then partially cured tuberculosis breaks out again, but this time the war with the bacteria turns out to be much more difficult*  
(Kubiak 2006: 97)

To claim that the categories of health and disease (including the different types of diseases) are a cultural construct is nothing innovative. However, the fact that the ways in which we metaphorize these phenomena affects our approaches to treatment, disease prevention and the behaviour of healthy people is not that obvious. The consequences of this conceptualisation also affect medical studies, the pharmaceutical industry and the behaviour of a 'normal' human, and this whole process is encoded by language mechanisms. From the cognitive perspective, the way we describe the phenomenon of disease are the metaphors specifically understood for this discipline. Moreover, it should be also pointed out in the introduction that if these categorical metaphors are culturally conditioned, then new metaphors will also occur, together with social changes and changes in the scientific understanding of disease processes.

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Prior to the bacterial breakthrough diseases could be conceptualised through the metaphors of internal system imbalance (legacy of Hippocrates); of penalties, flaws, sin (a perspective deriving from religious bases); of mechanical fault (Le Maitre), or through personalisation or reification (mainly in folk cultures). After the achievements of Louis Pasteur military metaphors were developed, with the development of technology the mechanistic metaphor was developed (mainly in the era of transplantation), and then the bio-informatics metaphor (development of neurology, neuroanatomy, and neuroscanning). On the other hand, today we can see that, along with a deeper understanding of the process and the consequences related to the specific understanding of health and disease, there is also a need to respond to new diseases, especially chronic and incurable ones, with new ways of metaphorization, free from stigmatising the patient, that will provide the patient with subjectivity and allow him/her to understand his/her state in other ways than in zero-one categories (win/loss).

In her pioneering essay “Illness as Metaphor” Susan Sontag asserts that “my point is that illness is not a metaphor, and that the most truthful way of regarding illness – and the healthiest way of being ill – is one most purified of, most resistant to, metaphoric thinking” (Sontag 1978: 3), but at the same time she notes that talking about illness without using metaphors is difficult, if not impossible. Jan Domaradzki argues with Sontag’s point of view, stating that “metaphors are essential to our understanding of the disease and they are the basis of the doctor-patient relationship” (Domaradzki 2015: 29) and it can be added that not only are the perceptions of health and disease of patients and doctors constructed based on metaphors, but neither is the scientific perspective free from metaphors dominant in a given period.

The primary way of presentation of phenomena which are elusive for the senses, the mechanisms of which exceed our direct cognitive abilities (e.g. viruses, bacteria, infection, treatment, etc.) and those that require abstract thinking is a process of metaphorization in a perspective proposed in 1980 by the American cognitive linguists George Lakoff and Mark Johnson (Lakoff and Johnson 1980) and developed (often critically) by their successors. In Lakoff and Johnson’s perspective, metaphors are not only a stylistic poetic device, but “[...] metaphors, as we have seen, are conceptual in nature. They are among our principal vehicles for understanding. And they play a central role in the construction of social and political reality [...]” (Lakoff and Johnson 1980: 159). The metaphor refers to the daily system of concepts which are used during thinking and perceiving, and according to which people function.

In this paper I will indicate and briefly discuss the most contemporary metaphors of disease; however, the bulk will be dedicated to metaphors linking disease with war, as they are most popular in the contemporary culture.

## BASE METAPHORIZATION OF THE DISEASE PHENOMENON<sup>1</sup>

Referring to the analyses of Lakoff and Johnson at the easiest and most basic level of conceptualisation: HEALTH AND LIFE ARE UP and SICKNESS AND DEATH ARE

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<sup>1</sup> The examples taken from English literature are cited as given in an original text (Lakoff etc.), other examples of metaphors that are taken from Polish sources were translated into the English language. This process does

DOWN<sup>2</sup> (Lakoff and Johnson 1980: 15), which indicates that we are dealing with *orientational metaphors* based on the physical human experience concerning functioning in space, the following examples are offered:

- To be *at the peak* of health.
- As to one's health, he/she is way *up* there.
- To be in *top shape*.
- *One's health is declining / sinking fast*.
- He *fell* ill.
- He *dropped* dead.
- He *came down* with the illness.

Metaphorization in such a form is original, natural and basically unaware. It is based on a simple top-down dichotomy, because a “healthy and active human takes the upright position; the disease and death, on the other hand, cause a collapse under the influence of gravity” (Tokarz 2000: 255).

The second form of the original metaphor is perceiving an illness as an area/state which one can enter and leave:

- To go through the disease,
- To get over the illness,
- To leave the disease behind,
- To descend into disease (e.g. depression) etc.

The third element complementing the whole is a natural metaphor associated with personification or reification of the disease. The most comprehensive dimension of personification or reification of diseases can be found in traditional culture and folklore. They abound in diseases which come to people in various forms, which can be conjured or driven away, and which have will. This is a form of disease that one can have a conversation with, that one can convince to leave, or negotiate the terms which are necessary to leave, the given person. However, like ill fate, the disease often “gets” the person who has been avoiding it for too long. Another aspect of similar actions is the image of disease as an object, as something that you can get from someone or give someone. Something that you can find and “hold in your hands”. There is a phrase in Polish that states that someone *got* a disease as well as an Anglicism which is becoming popular, namely, the humorous statement that something (more precisely – an uncomfortable situation or information) *gives* someone cancer (e.g. *This election is so bad. It gives me cancer*).

These three types of metaphors are the easiest reference system in a situation of health and disease. The first creates a vertical system associated with the body orientation, the second one is based on the horizontal-temporal system and presents the disease in a spatio-temporal

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not, however, impact the text much because the “root” metaphors are very similar in both languages and only particular cases can vary.

<sup>2</sup> Conceptual metaphors are usually rendered using small caps in the form of X TO Y, where X is the target domain and Y is the source domain.

relationship, something one can go through, and the third is based on the natural tendency to personify the elements of reality. The correlation between temporal understanding and the passed space also represents one of the basic human mechanisms of cognition. The discussed phenomena have, however, much more complex ways of metaphorization.

## DISEASE IS WAR

Even a superficial review of the literature shows that in the case of the linguistic conceptual domain including the state of being ill, the illness itself, and the actions taken by people in order to avoid it or cure it, we use the terminology connected with struggle, defeating the enemy, armed resistance, etc. A number of sentences partially borrowed from everyday communication (everyday conversation and media) and slightly modified in order to “concentrate” examples of metaphorization can be indicated:

- *The war against tuberculosis on the Asian front* does not bode victory.
- The disease that was partially cured *breaks out* again, leading to the *eradication* of the organism.
- The X medicine will allow you to *fight* all the symptoms immediately!
- *Beat* viruses! *Beat the* disease!
- Diabetes is *the greatest enemy* of modern society.
- New methods for *fighting cancer* – *defend yourself* before the disease *attacks* you.
- Do not *surrender* to the illness. *Fight it and win*.
- Like every autumn, flu viruses *started the massive attack*. Get vaccinated before flu *strikes you down*.
- *Repulse the attack*
- The disease *attacked* the lungs
- Lymphatic system – *the field of battle* against bacteria

As can be seen above, we can easily point out how the metaphor DISEASE IS WAR is commonly used. This metaphor may be, according to the typology of Lakoff and Johnson, considered a conceptual metaphor, in which one term gives the metaphorical structure to the second term and creates a structural metaphor, in which the network of relationships is transferred. In this case the emphasis is placed on the relationship involving the mapping between two domains: **the source one** (it corresponds to the traditional concept of a means of metaphor – *war, fight* etc.) and **the target one** (it corresponds to the traditional concept of the subject – in this case – *disease*) (Taylor 2002: 588). This relation is not seen objectively, and the similarity is the result of the subjective perception of the reality. Lakoff cites a similar metaphor – ARGUMENT IS WAR – which, according to Elżbieta Tabakowska, “is the background of our metaphorical thinking about the argument; it can be seen in phrases such as win the argument, lose the argument, make a retreat, lay down one’s arms” (Tabakowska 2001: 64). In a text written several years after the famous “Metaphors...” Lakoff and his co-authors point out that TREATING ILLNESS IS FIGHTING A WAR (the Source Domain is war and the Target Domains are

illness, treatment, medicine) where: 1. The Disease is an Enemy; 2. The Body is a Battleground; 3. Infection is an Attack by the Disease; 4. Medicine is a Weapon; 5. Medical Procedures are Attacks by the Patient; 6. The Immune System is a Defense; 7. Winning the War is Being Cured of the Disease; 8. Being Defeated is Dying (Lakoff, Espenson and Schwartz 1991: 179).

In this case, we can indicate two related types of this metaphor. In the first one *win* or *lose* in the fight against the disease which *can attack* or *get the patient* and the patient can or should *ward it off*, *fight it* or *struggle* against it and not *surrender* to it or *give up*. In this context, through the process of personification we are dealing with the metaphor DISEASE IS ENEMY. The second type, occurring in parallel, is by which the viruses/bacteria/pathogens are personified and become the enemy. They *attack* and *lurk*, they are *insidious*, we fight a *war against them*. In this semantic system DISEASE IS WAR (the disease is understood as a state) and illness, treatment and recovery are conceptualised in the terminology as *won* and *lost*, *battle*, etc. So we can assume that we are dealing with the comprehensive metaphor of DISEASE IS ENEMY/WAR, which in addition is well-conventionalised: users are not aware of its metaphorical nature which becomes clear and obvious at the moment of revealing it.

This metaphor's 'productivity' (many detailed language expressions and the ability to create a large and open collection of expressions representing its specification) (Taylor 2002: 599) is indicated by the fact that apart from individual phrases, set phrase expressions, and sentences, one can also encounter whole fragments of texts in which metaphorization of disease referring to the conceptual domain associated with war and fighting is an 'axis of meaning'. As an example, an excerpt from an article entitled *Mikroby na wojennej ścieżce – wojna ludzkości z chorobami* in the popular magazine "National Geographic", which as a popular science magazine cannot be suspected of extravagance and flowery style, although it does not here limit itself to *strictly* scientific jargon: "Today the viruses attack. [...] In order to confront them, the world had to wait for the creation of vaccines against these germs. However, this means winning the battle, not the war. Even though our arsenal is growing and the scientists and doctors have at their disposal the entire range of weapons, it is not known how long we will have enough ammunition [...]" (National Geographic 2016). In turn, "The Plague" by Albert Camus can be cited as an example of literary expression in which the use of a war metaphor becomes the central motif of the novel, in which the titular disease is clearly connected with war.

It can be concluded that the metaphor DISEASE IS WAR/ENEMY works perfectly at many levels of specification and is extremely productive, even at the level enabling the implementation of literary devices, which due to the strong conventionalisation will require interpretation, while not being clear to each recipient on an *ad hoc* basis. An alternative to this metaphor, firmly based on personification, is the combination DISEASE IS SILENT KILLER, in which a disease in hiding attacks insidiously and is deadly, merciless and difficult to detect. Domaradzki indicates the 'detective' metaphor, similar to those mentioned above, according to which the physician, as an investigator, tracks down, collects evidence (symptoms) and files charges by means of diagnosis (Domaradzki 2015: 36). However, all of them are variations on the theme of the base metaphor of DISEASE IS WAR.

## OBJECTIONS TO THE METAPHOR DISEASE IS WAR/ENEMY

Significant reservations concerning this concept should be indicated. First of all, metaphORIZATION is not a 'total' procedure and it has some limitations. As far as medicines and a wide range of medical devices and therapies can be considered *weapons* or *ammunition*, the pharmaceutical industry is not associated (outside the literature) with the armaments industry, nor is the doctor seen as an officer, staff member, commander, etc. This metaphor is limited mainly to the patient's body presented as a *battlefield* and to external factors leading to the *invasion* of the patient's body. The *war*, on the other hand, extends to the extracorporeal spheres, mainly related to the overall *battle* against a variety of diseases, which takes place in laboratories and by taking medicines. On the other hand, metaphors from outside this semantic range can be found, e.g. the surgeon-butcher mentioned in the literature (linked not by the metaphor of war, but by analogy with cutting the body, etc.) and the universal concept of disease as something that one can *get*.

The second reservation is much more significant. First, the kind of metaphORIZATION that has been discussed is most relevant in cases of infectious diseases. It can also correspond, even though not that precisely, to parasitic, allergic and autoimmune diseases (*civil war*). In the case of cancer there is a parallel set of metaphors described by Sontag in the already quoted text. It is peculiar for this disease (stigma, punishment, judgment of the court), but considering the metaphor of war – one can *win or lose* in the battle against cancer, and it can be *bombed* with chemotherapy, but the *fight* with it becomes problematic when we have this disease and *beating* most types of cancer is at least unlikely considering today's medical developments. This approach to disease has additional disadvantages: in the process of treatment it makes it easier to concentrate on the disease as the key factor of patient marginalisation and as a subject of the doctor's actions. On the other hand, it reinforces the stigmatisation of the "losers", those who do not take up the fight against the disease, who surrender or simply "allow themselves to lose."

There are those kinds of diseases to which the metaphor of war does not apply and, as it will be shown below, it can have disastrous consequences. In the case of chronic diseases and incurable disorders and conditions (in our times) such as rheumatoid arthritis, multiple sclerosis or Down syndrome, it is hard to talk about *the fight against* something. Indeed, one should not *surrender* to it, and in this context, the metaphors connected with war apply, but these are not diseases that one can *beat* and against which you can or often should *fight*, as it is impossible to *defend* oneself against them or count on *victory*. Here the metaphor DISEASE IS WAR has serious limitations.

A completely different area concerns the range of diseases, illnesses and mental disorders that have their own metaphors based on the understanding of the mind and its states, standards, and states of balance or madness which are specific to our culture. This does not mean that the metaphor DISEASE IS WAR/ENEMY does not apply, especially in the area of motivating patients *to fight* against these diseases in order to *beat them*.

## CONSEQUENCES OF THE DISEASE IS WAR/ENEMY METAPHOR

A semantic connection between DISEASE and WAR carries very specific consequences. This type of metaphORIZATION "constitutes the structure of our popular terms which are

commonly used in popular thinking and everyday communication” (Turner 2000, p. 260), and “the way we think, what we experience, and what we do every day is very much a matter of metaphor” (Lakoff & Johnson 1980:3). The result is the real impact of the specific understanding of the disease as a war at many levels of our lives, not necessarily associated directly with being ill, and these consequences can be both positive and negative.

First, the conceptualisation of a DISEASE as WAR can have a positive effect not allowing us to downplay our condition, in the same way as we would not ignore hostilities in the area where we live. It can have a positive impact not only on the frequency (reasonable and unreasonable) of appointments made to see a doctor but also provide a strong spur to a serious approach to preventive activities. The other side of this phenomenon is much less positive: perceiving the disease in the framework of military terminology, one could become much more prone to social phobias and fears regarding illness and to media messages based on the fear of epidemics, etc.

The military perspective of disease can certainly be useful in the area of the campaigns for the fight against infectious diseases organised by state institutions. It is easier to organise large quarantines, compulsory vaccination and resettlement of healthy or sick people when able to use propagandistic terminology supporting militarisation, in addition to the state apparatus. Such a total approach to the understanding of the disease, as a literal ‘enemy’ which must be beaten, often with the help of the army and other preventive forces, reveals a question often discussed by postmodern thinkers (especially biopower/biopolitics by Foucault) concerning power and obedience exerted by the control instrument and which the persons subject to this instrument are not aware of, the mechanisms of power and enslavement of which are hidden in language and its applications. However, it is impossible not to notice that the militarisation of the discourse increases the importance of obedience and reduces possible objections.

Moving to a more concrete and pragmatic dimension, a specific way of thinking about health and disease causes problems with conceptualisation of those cases which go beyond the most general semantic scheme. The perspective of John R. Taylor is worth mentioning here. He discusses the metaphor of ARGUMENT IS WAR, which is typical for Lakoff and Johnson’s approach, stating that the domain of intellectual argument is understood in the context of war, which has metaphorical consequences. Because wars end with victory for one side, an argument which leads to agreement ceases to be an argument. (Taylor 1995: 188). Patients who must cope with incurable diseases (not even necessarily lethal diseases) and their attending physicians cannot find words to talk about the disease, which they cannot *overcome* or *beat*. This problem is highlighted by therapists who work with people suffering from an uncomfortable chronic illness (*suffering* from a given illness and not *fighting* it) notice the problem of depression that may result from the inability to verbalise a situation in which one has to *contend* with the disease until the end of his/her life without hope of *winning* (Płonka-Syroka, Dąsał and Wójcik 2015). It can also lead to a situation where a patient turns to services from the area of paramedicine, the practitioners of which often have no scruples about creating a vision of *beating* any illness in the patient’s mind.

Consequences can be also found when analysing the approach of pharmaceutical concerns and/or research centres in terms of different directions of research. Concerning long-term

therapies aimed at making viruses lie dormant (as in the case of the HIV virus, where the therapy consists in preventing the AIDS disease) it is impossible to cure the disease, in the sense of *overcoming* it. This causes serious psychological problems for patients who are unable to cope with the state of their body even at the language level. It is certain that during the first twenty years of research greater emphasis was put on research aimed at *beating* the virus and less emphasis was put on, and therefore less financial support was assigned to, research which aimed at ‘putting the virus to sleep’, which as it turned out was the only effective way. We can only speculate about the scope of our metaphorical understanding of disease categories, although such conclusions do not seem to be unreasonable. It must be also indicated that this type of therapy should require the introduction of metaphorical terminology of a completely different type.

Another real problem with the understanding of disease is the approach of modern patients towards their health and the treatment process. If DISEASE IS WAR (strictly speaking, a defensive war), there are no weapons which would not be justified to use to repel the enemy invader. As a result, we will find the language support in drug dependence of the modern man, who, first of all, has to fight all the symptoms of disease and should do it as quickly as possible (hence the popularity of all the language devices with the words ‘maxi’, ‘ultra’, ‘forte’, etc. in the names). The vast majority of our daily ills would be much more easily cured by means of rest and the simplest home methods, but who wants to wait when *enemies prowl in his/her body*. The other side of the same process is common in European countries (fortunately to a lesser extent) as ‘antibiotic mania’: the use of the strongest drugs for the lightest medical conditions or taking antibiotics ‘just in case’, without any medical justification. Causes of this phenomenon are, of course, not only language-based, although such understanding of health and disease supports this practice.

And the last element, closely related to the previous one, is the media’s use of the ‘war’ understanding of disease. On the one hand, there are advertisements of big pharmaceutical concerns, which fuel our fears of the ‘enemy’ in order to impel us to use their products, stimulating ‘drug dependence’. A quite primitive image of a grotesque, personified virus which a given medication fights against is the dominant type of pharmaceutical advertising in the case of infectious diseases, mainly infections of the upper respiratory tract. On the other hand, if they were not effective, advertisers probably would not use such measures.

When trying to briefly specify the reasons for such metaphorization of the DISEASE domain, it can be indicated, according to both Lakoff and Johnson and Tabakowska, that the more abstract and elusive for our physical experience the conceptual domain is, the more often and more gladly it will be subject to such a process (Tabakowska 2001: 64). In this context, the DISEASE IS WAR/ENEMY metaphor can be considered a *structural* metaphor, in which the disease as a phenomenon without sharp boundaries or a clearer structure (like *health*) is included in the terms of ‘things that have sharper boundaries and clearer structure’ (Turner 2000: 257). On the other hand, neither do *war* or *enemy* fall into the category of highly precisely defined boundaries.

When appreciating the contribution of Lakoff and Johnson and at the same time agreeing with reservations concerning the necessity of metaphorization of highly abstract concepts, expressed even by Taylor (Taylor 2002: 592), it should be noted that even if the domain of



DISEASE had to be metaphorized (or rather, given the importance of this sphere of life it is hard to argue with the assumption that these spheres have always been highly metaphorized since a human, as a species, began to think consciously about the phenomena of health and disease), the domain of WAR is also complex and abstract. Moreover, we have yet to answer the question of why *this medium* of meanings and senses was placed on such a *basis of meaning* and, as we can suppose, at some historical stage displaced or at least dominated other ways of thinking about the disease. I believe that the right clue in this area is given by Sontag, who indicates that the key moment of the beginning, if not creating, of supremacy of the DISEASE IS WAR/ENEMY metaphor is the bacteriological breakthrough associated with Louis Pasteur and the birth and triumph of the clinical paradigm of medicine, the origins of which date back to the last two decades of the 19th century (Sontag 1978: 70). The discovery of bacteria and viruses as pathogenic agents led to the beginning of a series of new associations, one with quite elusive, for the scientific knowledge, specifics of the mechanism of infection and becoming infected. On the other hand, a new kind of all-out war, massive attacks, line of defence, penetration of the territory of enemy etc., which fully showed its face during the World War I and reached its apogee during World War II, was linked to the understanding of disease and the body's defence forces supported by an arsenal of drugs that are to help overcome the disease. It does not mean that this type of metaphor had not been used earlier, but a lack of knowledge of the pathogenic mechanisms was the reason for the functioning of alternative patterns of metaphorization.

## METAPHORIZATION OF DISEASE BEFORE THE BACTERIOLOGICAL BREAKTHROUGH

The war metaphor had been functioning in relation to the sphere of health and disease long before the achievements of Pasteur, traces of which we can also find in ancient and medieval sources (The Old Testament, Byzantine texts and European medical treatises). However, the DISEASE IS THE STATE OF IMBALANCE metaphor, the origin of which may be traced at least from the concept of Hippocrates, was much more popular. According to his humoral pathology, health depended on the balance of the four bodily fluids (humours) that fill the body: blood, yellow bile, mucus (phlegm) and black bile, and their mutual relations affect health and temperament. It was one of the main currents of ancient medicine, which through the works of the Roman physician Galen and then thanks to the Arabic medics, spread at least through the areas of Europe, North Africa and the Middle East. However, as Paulina Lewicka points out, these concepts were known and popular in the Far East as well (Lewicka 2017). After disseminating the bacterial concept of diseases of this etiology, the metaphor of balance became outdated. However, in the case of mental illnesses and the fledgling psychiatry, the concept of *mental imbalance*, whether emotional or mental, *unsteadiness*, *instability*, the concept of *poles* with the 'balance point' between them, etc. is still valid. It is true that psychopharmacology and still-developing neuroimaging have changed the image of psychiatry; however, at least in the popular opinion the stability of the human psyche is associated with maintaining some form of balance.

On the other hand, it should be pointed out that today we are seeing a renaissance of such an approach to health and disease. Clinical medicine discerns the weaknesses of the classical mechanistic approach and the search for a more holistic approach sees value in perceiving health and disease in terms of balance. The WHO's definition of health indicates that in addition to the absence of disease, it is also a state of complete physical, mental, and social welfare (well-being) and balance between these elements. At the same time, it cannot be denied that a variety of paramedical pseudo-therapies arising from the basis of the New Age very strongly exploit the metaphors of balance. The metaphors of balance have not replaced the metaphors of war, and we can often find cases that occur in parallel. At the physiological level one must fight with the disease, and at the psychological level one must search for balance, etc. Similar metaphorizations are also characterised the ecology and healthy eating movements, where overall balance also has preventive effects.

In the days before the bacteriological breakthrough, the metaphor DISEASE IS PUNISHMENT/FLAW/SIN which derives from the paradigm of religious ethics (but also older, more traditional contents may be found) may be also indicated. As early as in the Book of Leviticus there are recommendations for remedying leprosy, which was seen as occurring as a consequence of infringement of the ritual purity rights, through making offerings and ritual purification. The classic anthropological literature is full of examples in which the disease is presented in correlation with the flaw/impurity that can be transmitted to other people and sometimes to objects (cf. Douglas 1966). The bacteriological breakthrough has not changed ways of thinking and today we can still find concepts assuming that at least some diseases are a punishment for direct or indirect offenses. Sontag convincingly shows that tuberculosis, cancer and AIDS are not devoid of ethical connotations associated with punishment, sin, or fault (Sontag 1978 and 1988). However, when the discourse concerning the great diseases associated with the progress of civilization is analysed (often, unfortunately, connected with the followers of conspiracy theories), it turns out that cancer, AIDS, and even diseases associated with obesity are some form of *punishment* for pollution, overcrowding, dissipation or excessive tolerance of the consumer societies of the West.

Another clearly isolated metaphor is the mechanistic metaphor which, admittedly, was verbalized by Julien de La Mettrie in 1748 in "Machine man" ("L'Homme Machine"), but its foundations trace back to antiquity (atomism) and its reference to medicine can be found in Descartes. In this vision of health and disease the human body is a mechanism/system of parts, which can be repaired by a skilful mechanic/medic. Alternatively, if necessary, some parts can be replaced with new ones. Its 'great comeback' can be dated back to the 1960s, when transplantation was flourishing and the idea of 'replacement of broken parts' was gaining in popularity. The following decades show further development of biotechnology, adding mechanical and/or electronic elements, healing nanorobots to body parts, etc. It seems that associating the human body with the machine is an irreversible process and it has certainly left its mark on the language and metaphors related to health and disease. In this perspective pneumatic-hydraulic metaphors relating to the blood system and respiratory system are most typical (pumps, pumping, clogging of e.g. blood vessels, which forces the subsequent restoring of patency of the vessels; parts of the body can 'conk out' or break, which has to be 'fixed' by the surgeon). In addition to these quite obvious consequences, in the form of developing

specialisation of medicine based on this paradigm (doctors of broader and broader specialities), it dehumanises the process of treatment and virtually ignores the *welfare* which is so strongly highlighted nowadays. It should be also acknowledged that professional palliative medicine came into existence no earlier than the second half of the 20th century as the result of earlier underestimation of the sphere of mental support and the fight against pain.

## MODERN METAPHORS OF DISEASE

The development of science and medicine did not end with the achievements of Pasteur. Subsequent discoveries, as well as changes in culture and the way societies function including the introduction of subsequent technological innovations, have led to the creation of new metaphors related to the spheres of health and disease. Some of them derive directly from the incorporation of new technologies into daily language metaphors; others result from the conscious exploration of new ways of speaking about disease and talking with patients. With technological development, a new type of metaphor appropriate to neurological problems was created on the basis of the above-mentioned mechanistic metaphor. From a bioinformatics perspective (Domaradzki 2015: 35), the brain is the central processing unit (CPU): sometimes it can ‘hang’, sometimes it needs to be ‘reset’, and there are ‘lags’ during its functioning. It is understood as a bio-processor which through the nerves (the ‘wiring’) it controls the peripheral devices. Even though this approach is basically not wrong, its ‘brain-centrism’ has certain limitations (Damásio 1994).

We have already discussed the approach relating to Hippocrates classical perspective of loss and balance in the body. Apart from the aforementioned pseudo-therapies from the area of questionable New Age medicine, today’s therapists searching for language which does not stigmatise and potentially burden with the stigma of weakness have turned to the ‘harmonious’ and ‘balanced’ perspective of health. The ecological perspective, strongly emphasising the issues of prevention, willingly refers to concepts related to balance and responsibility. The travel metaphor is another interesting perspective, as Domaradzki states “even though it makes the disease become the challenge, in contrast to war or sport, it gives the patient the possibility of choosing different paths. The author describes the disease itself as an opportunity for personal growth and development” (Domaradzki 2015: 39).

## SUMMARY

Metaphorization of our everyday language has an impact on our daily lives. The conceptual metaphors of DISEASE IS WAR/ENEMY; PUNISHMENT/FLAW/SIN; and MECHANISM FAULT carry very specific consequences. However, we should remember that even though it is theoretically possible to imagine other ways of presenting this topic, any top-down change of methods of metaphorization in this area is hardly possible. Language naturally responds to changes in the surrounding world, and probably in the case of dissemination of therapies based on methods which “put to sleep” pathogens or epidemics of chronic/incurable/genetic

diseases, language will adjust on its own to the changing environment. It is good to be aware of such determinants in order to be able to properly respond to specific situations that can afflict us or our family, as well as in order to be less influenced by the media in this area.

Considering further steps in the studies of this topic from the perspective of cognitive linguistics, the category of disease in the context of centrality of this category and its prototype effects having regard to the achievements of Eleanor Rosch and Georges Kleiber is worth analysing. It clearly seems that the best, most prototypical specimen in the category of DISEASE includes infectious diseases, probably with influenza among them. And these conditions are metaphorized with the use of the DISEASE IS WAR/ENEMY metaphor the best and fullest way. Other types of diseases of more peripheral category location (e.g. chronic diseases) will be metaphorized. Cancers and mental and developmental disorders such as autism are in categories which are specific to them and their metaphors, but one should bear in mind an area in which we witness the process of metaphorization and prototyping, that of genetic disorders. According to Tokarz “with respect to more complex concepts, the metaphors can create several different systems and each of them is internally consistent, even though these systems do not have to be consistent with each other” (Turner 2000: 259). Crossbreeding of various ranges of metaphors (e.g. DISEASE IS WAR/DISEASE IS PUNISHMENT) may constitute an interesting perspective.

Certainly, the metaphors of health and disease constitute an interesting field for consideration, although one should not go to extremes and try to explain all the behaviours related to them. However, there is no doubt that such an influence exists and being aware of it allows us to understand our ways of thinking, our experiences of the surrounding reality and most importantly, our ways of functioning more fully.

## REFERENCES

- Damasio, Antonio 1994. *Descartes' Error: Emotion, Reason, and the Human Brain*, New York: Putnam.
- Domaradzki, Jan. 2015. *Medycyna i jej metafory. O roli metafory w komunikacji lekarz–pacjent*, „Kultura i Edukacja”, 3, 109: 27–46.
- Douglas, Mary. 1966. *Purity and danger. An analysis of concept of Pollution and Taboo*, London: Routledge.
- Kubiak, Jacek. 2006. *Sojusz mikrobow*, „Polityka”, 2582, 02.12.2006.
- Lakoff, George and Mark Johnson. 1980. *Metaphors we live by*, The University of Chicago Press.
- Lakoff, George, Jane Espenson and Schwartz Alan. 1991. <http://araw.mede.uic.edu/~alanzl/metaphor/METAPHORLIST.pdf>.
- Lewicka, Paulina 2017. *Teoria humoralna jako lingua franca. Galen, medycyna grecko-arabska, chrześcijaństwo, Żydzi, muzułmanie, muzułmański Bliski Wschód*, in: Bożena Płonka-Syroka and Mateusz Daśal (ed.), *Medycyna i religia*, t. 2, Warszawa [in press].
- National Geographic. 2016. <http://www.national-geographic.pl/national-geographic/ludzie/mikroby-na-wojennej-sieczce-wojna-ludzkosci-z-chorobami>.

- Płonka-Syroka, Bożena, Mateusz Dąsał and Wiesław Wójcik (ed.). 2015. *Doradztwo, poradnictwo, wsparcie*, Warszawa: Wydawnictwo DiG.
- Sontag, Susan. 1978. *Illness as Metaphor*, New York: Farrar, Straus and Giroux.
- Sontag, Susan. 1988. *Aids and its metaphor*, New York: Farrar, Straus and Giroux.
- Tabakowska, Elżbieta. 2001. *Kognitywne podstawy języka i językoznawstwa*, Kraków: TAIWPN Universitas.
- Taylor, John R. 1995. *Linguistic Categorization* (2nd ed), Oxford University Press.
- Taylor, John R. 2002. *Cognitive Grammar*, Oxford University Press.
- Tokarz, Marek. 2000. *Podstawowe założenia teorii metafory Lakoffa i Johnstone'a*, „Nowa Krytyka”, 11, 253–261.

#### METAFORYZACJA KATEGORII CHOROBY W PERSPEKTYWIE LINGWISTYKI KOGNITYWNEJ

Proces metaforyzacji jest najbardziej podstawowym mechanizmem ludzkiego aparatu poznawczego do ujmowania zjawisk nieuchwytnych bezpośrednio dla zmysłów (takich jak wirusy, bakterie, zakażenia, leczenie). Przed przełomem bakteriologicznym sfera zdrowia i choroby ujmowana była za pomocą metafor zaburzenia równowagi wewnętrznych systemów (np. humorów), kary, grzechu, mechanicznych uszkodzeń lub przez personifikację lub reifikację (choroba jako osoba lub przedmiot). Po odkryciach Ludwika Pasteura rozwijają się wojenne metafory, a wraz z rozwojem technologicznym – mechaniczyczne oraz bioinformatyczne. Z drugiej strony, stając się współcześnie coraz bardziej świadomi tych procesów, zdajemy sobie sprawę z potrzeby wprowadzenia i rozpowszechnienia nowych metafor, które odpowiadać będą aktualnym wyzwaniom medycyny – chorobom przewlekłym i nieuleczalnym, zaburzeniom genetycznym oraz całemu spektrum zjawisk neurologicznych. Niniejszy tekst przedstawi i omówi rozmaite metafory choroby, chorowania i leczenia, w głównej mierze koncentrując się na najbardziej popularnej metaforze wojennej, mającej potężny wpływ na nasze rozumienie zdrowia i procesów z nim związanych.

Słowa kluczowe: zdrowie, choroba, metaforyzacja, kognitywna lingwistyka